

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 1.8 JUL 2005

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Applicant's or agent's file reference SMC 60576/WO		<b>FOR FURTHER ACTION</b>		See Form PCT/PEA/416
International application No. PCT/GB2004/001227		International filing date (day/month/year) 22.03.2004	Priority date (day/month/year) 28.03.2003	
International Patent Classification (IPC) or national classification and IPC C09D125/14, C09D133/06, C09D175/04, C09D167/06, C08K3/22				
Applicant DSM IP ASSETS B.V. et al.				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand  24.12.2004		Date of completion of this report  19.07.2005		
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer  de Los Arcos, E  Telephone No. +31 70 340-3573		



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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

**Description, Pages**

1-39 as originally filed

**Claims, Numbers**

1-26 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	
	No: Claims	1-26
Inventive step (IS)	Yes: Claims	
	No: Claims	1-26
Industrial applicability (IA)	Yes: Claims	1-26
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

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**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1 = WO-A-02/33013

D2 = WO-A-02/32982

2. Documents D1-D2 disclose (see search report) compositions, coatings, methods and substrates that are indistinguishable from the subject-matter of claims 1-26.

It follows that the subject-matter of claims 1-26 is not novel in view of D1-D2 (Art. 33(2) PCT).

2.1 An argument in the sense that the thickener used in D1 (or in D2) "is a pseudoplastic thickener and thus not according to present claim 1" cannot be followed, since the present application states at page 21, lines 25-29 that **"Thickeners that exhibit a reduced viscosity as shear increases are known as pseudoplastic or shear thinning thickeners. (...) Thixotropic thickeners are shear thinning, however when the shear stress is removed the initial viscosity is only restored over a period of time"**, thus the definition of component e) in claim 1 is left dependant on an undefined period of time.

2.2 An argument in the sense that "the oil-absorption of the  $\text{TiO}_2$  used in D1 (or in D2) is not given" is correct; however, this implies that the file does not contain evidence showing that the  $\text{TiO}_2$  used in D1-D2 is different from component c) in present claim 1.

2.3 Objections under Item VIII should be noted.

3. The subject-matter of claims 1-26 is not inventive (Art. 33(3) PCT).

3.1 Being not novel, the subject-matter of claims 1-26 cannot be considered as inventive (Art. 33(3) PCT).

3.1 The file does not contain fair comparative examples vis-à-vis the closest prior art documents D1-D2.

In Example 1, **23,6 g** of **component 7** and **5 g** of **component 10** are used. However, in Comparative Example 1A the **same** amount of **component 7** but only **1,7 g** of **component 9** are used, and in Comparative Example 1B a **lower** amount of **component 8** and only **1,4 g** of **component 9** are used.

Several differences as to amounts and types of components can be seen also when comparing Example 2 vs. CEx 2 and Example 3 vs. CEx. 3.

Therefore, a technical effect in view of the closest prior art D1-D2 is not shown in the application.

#### Re Item VII

##### **Certain defects in the international application**

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.

#### Re Item VIII

##### **Certain observations on the international application**

1. Components a) and b) are defined in claim 1 in general terms that cover a broad range of polymers, including undisclosed components for which there is no basis in the application as filed. Additionally, this broad definition does not exclude the possibility of both components being simply one and the same (expressions **crosslinkable water-dispersible oligomer** and **dispersed polymer**; description pages 7 and 16-17) (Art. 6 PCT).
2. The functional definition in claims 1 and 16-17 for components d) and e) lack a precise meaning in the art (description page 22, lines 15-23 and, resp., page 21, lines 25-31); additionally, the functional definitions appear to include undisclosed components for which there is no basis in the application as filed (Art. 6 PCT).
3. The expressions **soft part** and **hard part** in claim 12 lack a precise meaning in the art and appear to include undefined components for which there is no basis in the application as filed (eg., is not clear whether they refer to block vinyl polymers having different soft/hard blocks, or to grafted vinyl polymers in which the grafted and the grafting parts are hard/soft parts respectively, or to mixtures of a hard and a soft

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polymer, etc.). Thus the expressions are imprecise and unclear (Art. 6 PCT).

4. The expressions **oil absorption number**, **soluble in water**, **water absorption number** and **tack-free time**, used in the claims should be clarified by including a method for their calculation (Art. 6 PCT).